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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,918	01/23/2004	Scott H. Siegel	CT 0123	1917

26092 7590 10/09/2007  
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EXAMINER
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KEATON, SHERROD L

ART UNIT	PAPER NUMBER
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2174

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/707,918

Applicant(s)

SIEGEL ET AL.

Examiner

sherrod keaton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6-07, 1-04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

This action is in response to the original filing of 1-23-2004. Claims 1-39 are pending and have been considered below:

### ***Double Patenting***

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claim 39 objected to under 37 CFR 1.75 as being a substantial duplicate of claim 36. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7-11, 13, 15-18, 20, 23-30, 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1).

**Claims 1, 23 and 33:** Cooke discloses a system, method and software for managing medical diagnostic digital images (Column 6, Lines 1-5), comprising:

a file server operable to store said digital images and an image directory for said digital images (Column 2, Lines 19-32), The archive station holds all the different files and allows user to retrieve specific images, like searching through the directory.

a database server operable to store an image record for each said digital image (Column 2, Lines 19-32),

a user workstation having an input device and a display device, and operable with a graphical user interface, said user interface being coupled to said file server and to said database server (Column 7, Lines 34-40),

said user interface being operable to create an image copy of a user selected digital image from said file server, to display said image copy on said display device, to receive

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user selected image manipulations of said selected digital image from said input device, to display said image manipulations with said image copy on said display device, and to add said image manipulations to said image record for said selected digital image as recorded manipulations (Column 10, Lines 54-65), (Column 28, Lines 23-34) .

Cooke does not explicitly teach that images are automatically added as manipulations but does disclose distinguishing that the edits has been made in reference to the original image (Column 8, Lines 61-67). However, The MPEP states, “ broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over prior art (See MPEP 2144.04). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to included the automated process in Cooke as found in the case law of the MPEP (In re Venner 120 USPQ 192; In re Rundell 18 CCPA 1290). One would have been motivated to add the automated process to improve efficiency of the user/administrator.

**Claims 2, 24, 36 and 38:** Cooke discloses a system, method and software as in claims 1, 23 and 33 above and further discloses wherein said user interface is operable to access said image record of said user selected digital image and to display with said image copy said recorded manipulations from said image record (Column 8, Lines 61-66 and Column 10, Lines 60-65).

**Claims 3, 25, and 39:** Cooke discloses a system, method, software as in claims 2, 24 and 33 above and further discloses wherein said image manipulations are added as

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commands and said recorded manipulations from said image record are displayed by executing said commands (Column 11, Lines 36-41 and Column 20, Lines 57-62).

Action buttons carry out a command.

**Claims 4, 7, 26 and 34:** Cooke discloses a system, method and software as in claims 1, 23 and 33 above and further discloses wherein said image manipulations are selected from the group consisting of move, zoom-in, zoom-out, rotate, contrast and annotations (Column 11, Lines 37-41, Column 32, Lines 8-20) and (Column 29, Lines 47-48, Column 35, Lines 57-60).

**Claim 6:** Cooke discloses a system as in claim 4 above and further discloses wherein said user interface is operable to display a plurality of contrast controls with said image copy in response to user selection of said contrast manipulation, said contrast controls including a plurality of slider controls each representative of a grayscale range (Column -31, Lines 38-40).

**Claims 8, 27, and 35:** Cooke discloses a system, method and software as in claims 7, 26 and 34 above wherein said annotations are selected from the group consisting of erase, text, pencil, highlight, point flag, measure and relative density (**text:** Column 33, Lines 6-25).

**Claim 9:** Cooke discloses a system as in claim 1 above and further discloses wherein said user interface is operable to display on said display device an application window, an image button palette and a tear-off tool bar, said image copy being displayed in said application window (Column 37, Lines 5-15 and Column 4, Lines 50-57 and Column 34,

Lines 55-61). The toolbar can be moved to different places on the display tearing away from its original position.

**Claim 10:** Cooke discloses a system as in claim 9 above wherein said tear-off tool bar is displayed at a user selectable location relative to said application window, said location being selected from inside said application window, outside and anchored to said application window, and outside and separate from said application window (Column 4, Lines 50-57 and Column 34, Lines 55-61).

**Claim 11:** Cooke discloses a system as in claim 10 above but does not explicitly disclose that the said tear-off tool bar includes twelve tool buttons with each said tool button corresponding to a said image manipulation (Figure 17).

**Claim 13:** Cooke discloses a system as in claim 11 above but does not explicitly disclose wherein said user interface is operable to display said tool buttons in any rectangular arrangement with rows and columns where the number of rows multiplied by the number of columns equals twelve. However Cooke does disclose a toolbar with rows and columns (Figure 17) the arrangement is an obvious modification by design and/or implementation preference and is recognized as part of ordinary capabilities of one skilled in the art. The arrangement would improve the usability of the interface based on the preference of the user.

**Claim 15:** Cooke discloses a system as in claim 9 above wherein said user interface is operable to display thumbnail images (Column 31, Lines 1-5) of all said digital images in

a series where said series includes all digital images of a patient from a single date (Column 25, Lines 1-34).

**Claim 16:** Cooke discloses a system as in claim 9 above wherein said user interface is operable to display a plurality of image layouts of said image copies of said digital images (Column 31, Lines 5-10).

**Claims 18 and 30:** Cooke discloses a system and method as in claims 1 and 23 above but does not explicitly disclose using a removable data storage media device in communication with said file server to receive said digital images from said file server and archive said digital images on removable data storage media. Cooke discloses a floppy disk and CD-ROM and the drives for utilizing these removable storage mediums on the viewing workstations (Column 7, Lines 30-41). Saving and retrieving data (images, text or audio) would have been an obvious use of the storage and is well known and recognized as a part of the ordinary capabilities of one skilled in the art. This improves operability of the system by providing a plurality of ways to store and retrieve data.

**Claims 20 and 29:** Cooke discloses a system and method as in claims 1 and 23 above further including a digital image capture device in communication with said file server and said database server, said capture device being operable to capture a digital image, transmit said digital image to said file server and to notify said database server of said digital image; wherein said file server is operable to automatically store said



digital image and said database server is operable to create a said image record for said digital image in response to said notification (Column 15, Lines 9-22).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1) in view of Howell (5767897).

**Claim 5:** Cooke discloses a system as in claim 4 above but does not explicitly disclose wherein said user interface is operable to display a zoom-in box centered in said image copy in response to user selection of said zoom-in and to display a zoomed in image of said image copy center around a point in response to user selection of said point after said zoom box is displayed. However Cooke discloses collimating an image (Column 31 and Lines 57-65) and Howell discloses a video conferencing system with a zoom box centered on a specified portion of an image (Column 10, Lines 57-67). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a zoom box centered on an area of an image in the modified Cooke as taught by Howell. One would have been motivated to use the zoom box to provide assured accuracy in the selection made by the user.

6. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1) in view of Microsoft Windows® 20000.

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**Claim 12:** Cooke discloses a system as in claim 11 wherein said tool buttons include point flag (Col 33, Lines 10-21), move (Col 32, lines 8-19), erase (Col 33, Lines 10-21), text (Col 33, Lines 10-21), measure (Col 33, Lines 10-21), contrast (Col 31, Lines 38-40), orient (Col 4, lines 60-62), and image button palette on/off buttons (Col 32, Lines 30-39). But does not explicitly disclose that the zoom feature (Column 11, Lines 37-41) is a button or disclose the ink, highlight. However Microsoft Windows discloses a zoom feature button (104) and the ink (103) and highlight (102). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include the buttons in the modified Cooke as taught by Windows. One would have been motivated to add the buttons to improve usability of the interface.

**Claim 14:** Cooke discloses a system as in claim 13 above wherein said user interface is operable to display said tool buttons with similar functions in adjacent positions in each said arrangement. However Microsoft Windows discloses similar functions being adjacent in arrangement (101). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention place similar functions adjacent to each other in the modified Cooke as taught by Windows. One would have been motivated to have the buttons adjacent to improve usability of the interface.

7. Claims 17, 28 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1) in view of Echerer (5740267).

**Claims 17, 28 and 37:** Cooke discloses a system as in claim 1 above but does not explicitly disclose wherein said user interface is operable to associate, in response to user input from said input device, a patient name with said user selected digital image and to add said patient name to said image record for said user selected digital image. However Echerer discloses a radiographic image enhancement and further discloses identifying a patient to the image for the database (Column 7, Lines 30-41). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to identify the image with information parameters used in Cooke as taught by Echerer. This improves the efficiencies of queries performed by the system.

8. Claims 19 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1) in view of Sitka (6330572 B1).

**Claims 19 and 31:** Cooke discloses a system and method as in claim 18 and 30 above but does not explicitly disclose said file server is operable to store all unarchived digital images and said digital images that were most recently accessed by said user interface while reserving free file space for digital images, and to clear archived unused digital images. However Sitka discloses a hierarchical data storage management which stores data like medical images (abstract) unsaved and most recently accessed to easily available storage medium and further discloses reserving and clearing space for the

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images (Column 23, Lines 3-47). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include the system in the modified Cooke as taught by Sitka. One would have been motivated to include the system because it provides efficient ways to store frequently accessed information in addition less frequently accessed information.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1) in view of Powell (6424332 B1).

**Claim 21:** Cooke discloses a system as in claim 1 above but does not explicitly disclose wherein said input device and said display device are combined into a touch-screen with user input selections being displayed as buttons on said display device. However Powell discloses image comparison apparatus and further discloses manipulating the image and view via a touch screen (Column 10, Lines 4-8; Column 12, Lines 21-38). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a touch screen for input in the modified Cooke as taught by Powell. One would have been motivated to include the touch input to provide improve operability of the system with dual input.

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10. Claim 22 and 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. (6574629 B1) in view of Powell (6424332 B1) and Sitka (6330572 B1) and Echerer (5740267).

**Claim 22 and 32:** Cooke discloses a system and method for managing medical diagnostic digital images, comprising:

a digital image capture device operable to capture digital images (Column 15, Lines 9-22);

a file server operable to store said digital images and an image directory for said digital images (Column 2, Lines 19-32), The archive station holds all the different files and allows user to retrieve specific images, like searching through the directory.

said file server being in communication with said capture device and operable to receive and automatically store said digital images from said capture device (Column 15, Lines 9-22);

a database server operable to store an image record for each said digital image (Column 2, Lines 19-32),

wherein said database server is in communication with said capture device and is configured to receive notification of said digital images from said capture device and to create a said image record for each said digital image in response to said notification (Column 15, Lines 9-22);

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and operable with a graphical user interface, wherein said user interface is coupled to said file server and to said database server, said user interface is operable to create an image copy of a user selected digital image from said file server, to display said image copy on said input and display device, to receive user selected image manipulations of said selected digital image from said input and display device, to display said image manipulations with said image copy on said input and display device, to automatically add said image manipulations to said image record for said selected digital image as recorded manipulations (Column 10, Lines 54-65), (Column 28, Lines 23-34) .

Cooke does not explicitly teach that images are automatically added as manipulations but does disclose distinguishing that the edits has been made in reference to the original image (Column 8, Lines 61-67). However, The MPEP states, " broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over prior art (See MPEP 2144.04). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to included the automated process in Cooke as found in the case law of the MPEP. One would have been motivated to add the automated process to improve efficiency of the user/administrator.

to access said image record of said selected digital image, and to display said image copy with said user selected said recorded manipulations from said image record (Column 8, Lines 61-66 and Column 10, Lines 60-65).

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wherein available said manipulations include move, zoom, rotate, contrast, and annotations (Column 4, Lines 58-67; Column 11, Lines 37-41; Column 32, Lines 8-20) and (Column 29, Lines 47-48, Column 35, Lines 57-60).

available said annotations include erase, text, pencil, highlight, point flag, measure and relative density (Column 33, Lines 6-25; Col 33, Lines 10-21).

and a removable data storage media device in communication with said file server and operable to receive digital images from said file server and archive said digital images on removable data storage media. Cooke discloses a floppy disk and CD-ROM and the drives for utilizing these removable storage mediums on the viewing workstations (Column 7, Lines 30-41). Saving and retrieving data (images, text or audio) would have been an obvious use of the storage and is well known and recognized as a part of the ordinary capabilities of one skilled in the art. This improves operability of the system by proving a plurality of ways to store and retrieve data.

Cooke does not explicitly disclose a user workstation having a touch-screen input and display device. However Powell discloses image comparison apparatus and further discloses manipulating the image and view via a touch screen (Column 10, Lines 4-8; Column 12, Lines 21-38). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a touch screen for input in the modified Cooke as taught by Powell. One would have been motivated to include the touch input to provide improve operability of the system with dual input.

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Cooke does not explicitly disclose user interface is configured to associate, in response to user input from said input device, a patient name with said selected digital image and to add said patient name to said image record for said selected digital image. However Echerer discloses a radiographic image enhancement and further discloses identifying a patient to the image for the database (Column 7, Lines 30-41). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to identify the image with information parameters used in Cooke as taught by Echerer. This improves the efficiencies of queries performed by the system.

Nor does Cooke explicitly disclose wherein said file server is operable to store all unarchived said digital images and said digital images that were most recently accessed by said user interface while reserving free file space for said digital images and to clear archived unused said digital images. However Sitka discloses a hierarchical data storage management which stores data like medical images (abstract) unsaved and most recently accessed to easily available storage medium and further discloses reserving and clearing space for the images (Column 23, Lines 3-47). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include the system in the modified Cooke as taught by Sitka. One would have been motivated to include the system because it provides efficient ways to store frequently accessed information in addition less frequently accessed information.



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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KRISTINE KINCAID can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK

9-25-07

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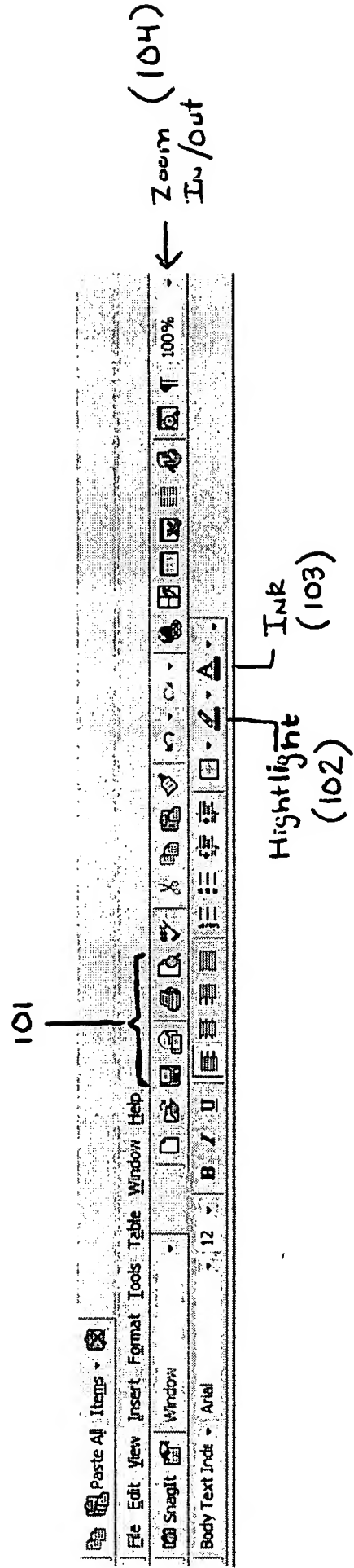


Figure 1